

**Application No.: 10/579,089**  
**Filing Date: March 9, 2007**

### **REMARKS**

Claims 1-9, 11-15, 18, 19, 22, 24, and 31-34, 36-49, 51-63, and 65-79 are currently pending. Claims 1-4 are amended herein to clarify that the protein concentrate is coagulated. Claims 15, 40, 55, 69, and 76-79 are adjusted in view of the amendments to Claims 1-4. Support for the amendments can be found throughout the specification and claims as originally filed, for example, paragraphs [0068]-[0074], [0098]-[0102], and [0111] of the specification.. No new matter is added.

Applicants would like to thank the Examiner and her supervisor for taking the time to conduct an interview for this application.

Applicants submit that this application is in condition for allowance and such action is earnestly requested. Each of the Examiner's reasons for rejection is addressed below.

#### **The Combination of Blazey/Lashkari/Dybing Does Not Make Claims 1, 4, 5, 9, 10-13, 15, 18, 19, 22, 63-67, 69-72, 76, and 79 Obvious**

Claims 1, 4, 5, 9, 10-13, 15, 18, 19, 22, 63-67, 69-72, 76, and 79 stand rejected under 35 U.S.C. § 103(a) as unpatentable in view of U.S. Patent No. 6,177,118 to Blazey et al. (hereinafter Blazey) in view of GB 1,057 170 to Lashkari and WO 02/082917 to Dybing as evidenced by U.S. Patent No. 4,655,127 to Skovhauge et al and U.S. Patent No. 5,455,051 to Groesbeck et al.

As discussed during the interview, Applicants submit that there is no reason to use a coagulated milk or milk protein concentrate in view of the Blazey, Lashkari, Dybing, Skovhauge, and Groesbeck references. Further, there is also no reason to use a coagulated starting material or a coagulant in an amount sufficient to cause coagulation to the dairy material processed in Blazey. In addition, a person of skill in the art would appreciate that a previously coagulated milk or milk protein concentrate has different properties and processing concerns versus a dairy material that has not been coagulated.

Claims 1, 2, and 4 are amended to recite "wherein the protein concentrate is selected from a coagulated rennetted milk protein concentrate, a coagulated rennetted milk, and a reconstituted coagulated rennetted milk protein concentrate" and Claim 3 is amended to recite "wherein the protein concentrate is selected from a coagulated milk protein concentrate, a coagulated milk,

and a reconstituted coagulated milk protein concentrate.” There is no reason to modify Blazey and the other cited references to achieve this feature.

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

Blazey, the primary reference cited by the Examiner, explicitly teaches away from using a coagulated renneted milk or milk protein concentrate because the object of the invention of Blazey is to produce a processed cheese *without* a coagulating enzyme treatment. (“It is an object of this invention to produce the desired texture of semi-hard and hard cheeses and their processed cheese derivatives *without the need to employ a coagulating enzyme treatment* with all of the milk-derived ingredients.” Col. 3, lines 56-60 (emphasis added)). Blazey further reinforces this point, stating that “[i]t is an object of this invention to *reduce or eliminate the enzyme coagulation step in making cheese* thus saving time and minimizing the variation caused by the changes in pH, calcium ion concentration, and enzyme activity. Where a low level of the enzyme rennet was used in the practice of this invention, less than about one-third of the cheese casein was exposed to the enzyme, *no coagulation was observed*, and the enzyme was denatured prior to packaging the cheese product so as to be inactive during storage of the cheese.” Col. 4, lines 11-20 (emphasis added). Blazey also discloses that “[o]ther preferred ingredients include organic and inorganic acids, especially citric acid or lactic acid, for adjusting the pH of the composition *without precipitating, aggregating, coagulating, or gelling the proteins*”. Col. 6, lines 58-61.

Blazey also fails to disclose any examples that involve coagulation. In fact Blazey only adds a bacterial starter culture and casein coagulating enzyme to satisfy legal requirements for labeling the product as a cheddar cheese. (“The addition of bacterial starter culture and the casein coagulating enzyme are for the purpose of satisfying the conventional and legal requirements for labeling this product as cheddar cheese. *The amounts of these components added and the temperatures immediately achieved in product manufacture do not allow*

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*appreciable bacterial fermentation or enzymatically catalyzed coagulation of the mix.”* Col. 9, lines 44-51; col. 10, lines 26-32; and col. 11, lines 9-16 (emphasis added)).

Again, the Examples of Blazey further reinforce that the addition of any coagulating enzyme was not sufficient to produce a casein coagulum in the retentate. (“The amount of coagulating enzyme added *was not sufficient to produce a casein coagulum in the retentate during this treatment*”. Col. 13, lines 24-26 (emphasis added)). Thus, to the extent that Blazey discloses the option of adding a coagulating enzyme, it is in an amount or under conditions such that coagulation does not occur.

Further, modifying Blazey to use a coagulated material or to add a coagulating enzyme in an amount sufficient to cause coagulation would change the principle of operation of the process of Blazey, which is specifically designed to not coagulate the treated dairy material. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) (Claims were directed to an oil seal comprising a bore engaging portion with outwardly biased resilient spring fingers inserted in a resilient sealing member. The primary reference relied upon in a rejection based on a combination of references disclosed an oil seal wherein the bore engaging portion was reinforced by a cylindrical sheet metal casing. Patentee taught the device required rigidity for operation, whereas the claimed invention required resiliency. The court reversed the rejection holding the “suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.” 270 F.2d at 813, 123 USPQ at 352.). Accordingly, there is no *prima facie* case for at least this reason.

Applicants submit that there is no *prima facie* case of obviousness in view of the explicit teaching away in Blazey, the primary reference.

Lashkari and Dybing fail to make up for the deficiencies of Blazey. Dybing fails to disclose coagulating the treated dairy material. Dybing states that coagulating enzymes are not necessary in their process and only that they may be added to manipulate texture, not form a coagulum (No coagulating enzymes, eg rennet, melting salts or gums are required to form these

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gels, but these ingredients can be added to manipulate the texture of the gels if required. The food gels can, if desired, be further processed, eg the cheese-like food gels can be processed using standard processed cheese manufacturing techniques to produce processed cheese-like products. Dybing at page 12, lines 14-18). The cheese flavor production methods of Lashkari also fail to make up for the deficiencies of the Blazey and Dybing noted above. Accordingly, Applicants respectfully request withdrawal of the rejections of independent Claims 1-4 and their dependents.

Claims 5-9, 11-15, 18, 19, 22, 24, and 31-34, 36-49, 51-63, and 65-79 depend from Claims 1-4 and recite all the elements of Claims 1-4 in addition to reciting further distinguishing features. Thus, Applicants respectfully request withdrawal of the rejection of these claims as well, for at least the reasons set forth above.

*No Disclaimers or Disavowals*

Although the present communication includes alterations to the application or claims, or characterizations of claim scope or referenced art, Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

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Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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